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Title: "Aiming for Educated Officers: Curriculum Evolution in Early Professional Military Education in the United States, 1880-1914."

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"Aiming for Educated Officers: Curriculum Evolution in Early Professional Military Education in the United States, 1880-1914."

After the Civil War, the introduction of new weapons and changing tactical operations led military leaders in the United States to recognize the changing nature of warfare and the need for "development of career officers prepared not only in the technical aspects of military affairs but in the higher arts of strategy and warfare."¹ Reform-minded officers, Brigadier General Emory Upton in the Army and Commodore Stephen B Luce in the Navy, worked tirelessly for the establishment of specially designed schools where officers could study their craft. Thus, the need for education of military officers beyond their practical, academy or college-based, training provided the impetus for the establishment of schools that would eventually form the nucleus of today's Professional Military Education (PME)² system of command and staff colleges and war colleges for military officers in the United States.

Today's military leaders are trusted with the employment of military forces in concert with United States national security strategy in an era of globalization and an ever-changing international security environment. PME students are exposed to a robust curriculum which

¹ John W. Masland and Laurence I. Radway. *Soldiers and Scholars: Military Education and National Policy* (Princeton, NJ: Princeton University Press, 1957), 81. For example, the introduction of rifled weapons in the form of new artillery cannons with increased range and accuracy as well as repeating rifles required new infantry tactics on the battlefield. In addition, the expansion of railroads following the Civil War and new transportation technology enabled large numbers of troops and supplies to be quickly moved to and from the battlefield, forcing a re-evaluation of deployment planning and execution of military strategy.

² Instruction 1800.01B, *Officer Professional Military Education Policy*, defines PME as educational programs designed to produce: Senior officers who can develop and execute national military strategies that effectively employ the Armed Forces in concert with other instruments of national power to achieve the goals of national security strategy and policy.

Instruction 1800.01B categorizes PME into a hierarchy of five distinct levels. They are: Pre-commissioning, Primary, Intermediate, Senior, and General/Flag Officer. Each service maintains their own PME programs at each of these levels. Pre-commissioning PME is conducted at service academies, university Reserve Officer Training Corps detachments, and officer candidate training programs. Primary level PME prepares junior officers for service in their assigned specialty, focusing on service-oriented tactics. Intermediate-level PME provides mid-level officers a better understanding of joint and service perspectives through analytic thought processes. Senior-level PME prepares senior officers for strategic leadership positions through critical analysis of strategy and campaign planning. General/Flag Officer-level PME prepares general officers for high-level joint, interagency, and multinational positions.

includes subjects such as the art of war (tactics and strategy), military history, diplomacy, international relations, terrorism, cultural studies, and foreign languages. This article explores the early days of PME in the United States, from the end of the Civil War through the end of World War I, and shows that it was the experience in World War I that finally solidified the existence of PME in the United States. Three PME schools established in the United States in the late 19th century are the subjects of this research: The Army's School of Application for Infantry and Cavalry established in 1881, The Naval War College established in 1884, and The Army War College established in 1903. The article will focus on the establishment of and curriculum taught at each school and the rationale behind the selection of that curriculum.

At their inception, in the years between the Civil War and World War I, United States PME schools were far from the robust institutions they are today. The need for PME was widely debated in the Army and Navy. Once the schools were open, they got off to slow starts. Budgets were tight, class sizes were small, and the schools endured much criticism. Indeed, the tenuous beginnings of PME led to uncertainty over whether the schools would even survive. Not until the second decade of the 20th century was the continued existence of PME schools assured.

The concept of PME did not originate in the United States. European countries developed PME programs and schools much earlier than the United States. One of the first PME schools was the Kriegsakademie, established by Prussia in 1810 as a military reform effort following defeat by Napoleon. The Kriegsakademie was due to the efforts of famed Prussian General Gerhard von Scharnhorst. Carl von Clausewitz, world-famous military theorist, served as administrative head of the school early in its early years. The British opened the British Staff College in 1858 also as part of military reform following the Crimean War. Likewise, France opened its Ecole Supérieure De Guerre in response to its war with Prussia in 1870. For the

United States, the changing nature of warfare in the post-Civil War period provided the impetus for development of its own PME system.

Prior to the Civil War, PME in the United States was confined to programs at the U.S. Military Academy at West Point and the U.S. Naval Academy at Annapolis. These schools provided pre-commissioning military education for the United States, which, combined with follow-on military training and experience, was considered sufficient preparation for military leaders. As Masland and Radway wrote, after the Civil War “new technological developments in warfare, including use of more complicated weapons and of new tactics and supply practices to employ them effectively, necessitated a need for more thorough preparation of officers.” In addition, senior Army officers began to see a need for “development of career officers prepared not only in the technical aspects of military affairs but in the higher arts of strategy and warfare.”³

United States Army

Military education was one area of reform that the United States Army undertook in the post-Civil War era. The Army established a technical training school for Artillery officers at Fortress Monroe, Virginia, and a technical training school for Engineer officers at Willett’s Point, New York, in the late 1860s. William Tecumseh Sherman, Commanding General of the Army from 1869-1883, was a proponent of expanding the education of officers beyond that received at West Point.

In 1875, Secretary of War, William Belknap, sent Army Major General Emory Upton to visit overseas military organizations in Asia and Europe. Upton, a West Point graduate, a Civil

³ Masland and Radway, 81.

War veteran⁴ and a protégé of Sherman, had established a reputation for being one of the Army's foremost thinkers and writers about military reform in the post-Civil War period. After his return, Upton reported that although West Point did a good job with its pre-commissioning military education, its graduates were "not given the means of acquiring a theoretical and practical knowledge of the higher duties of their profession."⁵ Upton proposed, among other things, establishing a general staff and a system for educating officers patterned after those he visited in Europe. Upton's major conclusion of his trip and criticism of military policy was that the U. S. policy of a citizen/volunteer soldier model was not sufficient for national defense or wise and that the U.S. should develop and rely on a professional military force.⁶

As Commanding General, Sherman was well situated to lay a foundation for the educational needs of Army officers. With the success of the schools in Virginia and New York as precedents, several senior Army officers recommended that, because of its size, central geographic location, and variable terrain, a school for infantry and cavalry officers be established at Fort Leavenworth, Kansas.⁷ On May 7, 1881, the fifty-fourth anniversary of the establishment of Fort Leavenworth, General Sherman issued General Orders Number 42 establishing the

⁴ Upton graduated from West Point in May of 1861 and was wounded in the First Battle of Bull Run two months later. He was wounded three times during the Civil War and ended the war as a brigadier-general at the age of 25. His experience with the Federal volunteers in the Civil War contributed to his views on a professional army. Richard Brown, "General Emory Upton – The Army's Mahan," *Military Affairs*, Vol. 17, No. 3. (Autumn 1953), p 125-126.

⁵ Masland and Radway, 81.

⁶ Richard Brown, "General Emory Upton – The Army's Mahan," *Military Affairs*, Vol. 17, No. 3. (Autumn 1953), pp 125-131. See also Stephen Ambrose, "Emory Upton and the Armies of Asia and Europe," *Military Affairs*, Vol. 28, No 1. (Spring 1964), pp 27-32 and David J. Fitzpatrick, "Emory Upton and the Citizen Soldier," *The Journal of Military History*, Vol 65, No. 2 (April 2001), pp. 355-389. Upton's reputation was largely confined to Army circles; it was not until Elihu Root, Secretary of War, read Upton's report of his Asian and European travels that the report gained general currency. Root published, at government expense the report in 1904, 23 years after Upton's death.

⁷ Timothy K. Nenninger. *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881-1918* (Westport, CT: Greenwood Press, 1978), 21.

School of Application for Infantry and Cavalry at Fort Leavenworth.⁸ The School of Application for Infantry and Cavalry underwent many changes in name, structure, and curriculum in the years following its founding and is today known as the U. S. Army Command and General Staff College.

Sherman's order directed that students for the new school would consist of one lieutenant from each of the Army's regiments of cavalry and infantry and that school faculty would consist of the school commander and five instructors. The order also stated that the Army would pay the expenses of the school except for textbooks and paper, which all officers would purchase with their own funds.⁹ Responsibility for actually opening the new school at Fort Leavenworth fell to General Philip Sheridan, Commander of the Division of the Missouri, and his immediate subordinate Major General John Pope, Commander of the Department of the Missouri. General Sherman's intentions for the new school's curriculum were outlined in the letter he wrote to General Sheridan dated November 22, 1881. He wrote,

I want this new school to start out with the doctrine that service with troops in the field, in time of peace, is the most honorable of all, and the best possible preparation for high command when war does come, as it always does, suddenly. The school should form a model post like Gibraltar with duty done as though in actual war, and instruction by books be made secondary to drill, guard duty, and the usual forms of a well regulated garrison.¹⁰

Colonel Elwell S. Otis was named the first commander of the new school and went to work organizing and staffing the school in anticipation of the arrival of the first class of officers. Colonel Otis drafted and submitted a code of regulations for the school to the War Department, which then published a detailed outline of the first instructional program for the school in

⁸ Elvid Hunt. *History of Fort Leavenworth, 1827-1927* (Fort Leavenworth, KS: The General Service School Press, 1926), 159.

⁹ United States Army General Orders number 42, May 7, 1881, printed in Hunt, *History of Fort Leavenworth*, 160.

¹⁰ Letter from General William Sherman to General Philip Sheridan, November 22, 1881, printed in Hunt, 161.

General Orders No. 8 on January 26, 1882. The order reiterated General Sherman's earlier stipulation that the drill and discipline of a normal garrison be paramount:

These must be his first care and the second is "theoretical instruction", which ought to precede a commission, but is not always the case, viz: reading, writing, grammar, arithmetic, geography, algebra, geometry, and trigonometry sufficient for the measurement and delineation of ground, and such history as every young gentleman should be presumed to know; and third, the "science and practice of war", so far as they can be acquired from books.¹¹

Incoming students were to be evaluated upon arrival at the school by the faculty and placed into one of two classes. Both classes received standard drill and discipline instruction, but those in the first class would receive only the higher instruction in the "science and practice of war." Those students judged to be deficient in basic educational skills were placed in the second class and were required to complete an additional year of study to remediate academic shortcomings. The specific course of instruction by class was as follows:

First Class

Mahan's *Outposts*
Meyer's *Signaling*
Mahan's (Wheeler's) *Field Fortifications*
Woolsey's *International Law and Laws of War*
Ive's *Military Law*
Hamley's *Operation of War*
Colonel Francis (sic) J. Soady's *The Lessons of War as taught by the great masters*
Lectures by professors and essays prepared by the students from general reading
Practical instruction in surveying and reconnoitering by itineraries and field notes¹²

¹¹ Headquarters of the Army General Orders No. 8, January 22, 1882, printed in Hunt, 163.

¹² The complete titles of the various texts used are: Dennis H. Mahan. *An elementary treatise on advanced-guard, out-post, and detachment service of troops and the manner of posting and handling them in presence of an enemy; with a historical sketch of the rise and progress of tactics, intended as a supplement to the system of tactics adopted for the military service of the United States, and especially for the use of officers of militia and volunteers.* (NY: Wiley, 1853); Dennis H. Mahan. *A treatise on field fortification containing instructions on the methods of laying out, constructing, defending, and attacking intrenchments, with the general outlines also of the arrangement, the attack and defence of permanent fortifications.* (NY: Wiley, 1862); Rollin A. Ives. *A treatise on military law and the jurisdiction, constitution, and procedure of military courts with a summary of the rules of evidence as applicable to such courts.* (NY: D. Van Nostrand, 1879); Edward B. Hamley. *The operations of war explained and illustrated, 4th Ed.* (London, William Blackwood, 1878); France James Soady. *Lessons of war as taught by the great masters and others; selected and arranged from the various operations of war.* (London: W.H. Allen & Co., 1870). Although Hunt reports that Woolsey was the author of *International Law and Laws of War*, the following books

Second Class

Correct reading aloud, with care and precision, with proper accent and pauses, to be heard and understood

Writing—a plain hand, easy to read, designed for the use of the party receiving and not an exhibition of the haste and negligence of the writer, especially the signature.

Grammar

Arithmetic

Geometry

Trigonometry

General Sketch of History

History of the United States¹³

The academic year for the School of Application for Infantry and Cavalry was slated to include two terms beginning in October and ending the following May, but in its first academic year in 1882, classes ran from March 11th to June 13th. Problems plagued the first year of the school. The first and second classes both met twice daily during weekdays for recitation exercises, but there were few lectures and no demonstrations; the library had no books and textbooks were in such short supply that General Sherman lent his personal copy of Soady's *Lessons of War* to the school; and two students even served as instructors.¹⁴ Despite these problems, Colonel Otis believed the school did the best that could be expected during its first year and reported favorable progress to the War Department.¹⁵

Each year, the school's faculty found it necessary to adapt the curriculum to the particular abilities and needs of the different classes of students. Thirty to forty-five lieutenants were entering each year. Colonel Otis observed that "All these officers must be merged into two divisions. As a consequence, the average ability of the members of the divisions must be

were found under Woolsey and Halleck (searched by title): Theodore Dwight Woolsey. *Introduction to the study of international law: designed as an aid in teaching, and in historical studies*, 5th ed., rev. and enl. (New York: C. Scribner's Sons, 1878); Henry Wager Halleck. *Elements of international law and laws of war*. (Philadelphia: J.B. Lippincott, 1878). No book was found by Meyer on signaling although in 1880, *War Department weather map, Signal Service, U.S.A.* was published by order of the Secretary of War, Albert J. Meyer.

¹³ Ibid, 164.

¹⁴ Nenninger, 25.

¹⁵ Ibid.

estimated, and lessons given according to the estimate fixed.”¹⁶ Because of the remedial nature of its second class curriculum, the school soon earned the nickname “kindergarten.” Arthur Wagner, Army captain and future School of Application for Infantry and Cavalry faculty member, wrote in 1884,

The curriculum of the second class at the infantry and cavalry school is a mortifying comment on the personnel of two important branches of the military service. It is the fault of a grossly deficient system of officering the army that it should be necessary to teach arithmetic and ‘correct reading aloud’ to officers who are employed in a profession which is daily becoming more scientific, and which is supposed to require a fair degree of ability and studious preparation on the part of its followers.¹⁷

But the days of the “kindergarten” were numbered.* In 1886, the name of the school was changed to the United States Infantry and Cavalry School. That same year, Commandant, Brevet Major General A. McCook, recommended to the War Department a set of sweeping changes to the curriculum. The War Department responded by forming a Board of Officers to prepare a new set of school regulations. Lieutenant General Philip Sheridan, Sherman’s replacement as Commanding General of the Army, published General Orders No. 17 on March 27, 1888, that abolished the two class structure and established a comprehensive curriculum.¹⁸

A main feature of the new school structure was that all student officers would be in one class. In addition, the academic year would consist of one year of study and one year of practical exercises for a total of two years. Students were to be given weekly recitation grades and an annual examination each June. The curriculum was organized into separate and distinct departments of instruction. The departments included a Department of Military Art, Department of Law, Department of Engineering, Department of Cavalry, Department of Infantry,

¹⁶ Hunt, 167.

¹⁷ Arthur L. Wagner, “The Military Necessities of the United States,” *Journal of the Military Service Institution* 5 (September 1884): 262. Quoted in Nenninger, 27.

¹⁸ Ibid, 168.

Department of Artillery, and Military Hygiene and Early Aid to the Injured.¹⁹ The order further delineated the courses that would be taught within each department. In the Department of Military Art, courses in military policy and institutions, strategy, tactics, operations, military geography, military administration, and didactic study of campaigns and battles were designed. The Department of Law offered courses in military law, constitutional law, and international law. In the Department of Cavalry, students would learn cavalry tactics, cavalry field service, equitation, and hippology.²⁰ The Department of Infantry included of a course in infantry tactics and a course in infantry field service. In the Department of Artillery, students would study ordinance and gunnery through problems and field exercises. Finally, within Military Hygiene and Early Aid to the Injured, students would attend lectures and perform recitations in military hygiene and rendering aid to injured personnel.²¹

This new curriculum marked a turning point in the development of officer education in the Army. Not only did the new regulations effectively rid the school of its kindergarten label, the introduction of the courses offered through the Department of Military Art at the Leavenworth school showed the Army took real steps toward institutionalizing the training of its officers for the duties of higher command positions.²² The curriculum taught during the years 1881 through 1886 was primarily geared toward preparing young officers for company grade duty, not to assume the duties of higher command. Because student officers were all junior lieutenants, graduates would not assume positions of higher command for quite some time. Nevertheless, the Army was attempting to fill a needed void in officer education.

¹⁹ Headquarters of the Army General Orders No. 17, March 27, 1888, printed in Hunt, 168.

²⁰ Hippology refers to the study of horses.

²¹ Ibid, 170-171.

²² Ibid, 171.

The decade of the 1890s was a period of slight but progressive changes to the curriculum of the Infantry and Cavalry School. The designation of honor graduates and a greater emphasis on practical field exercises was added in 1890. General Orders No. 83, issued on October 12, 1891, added a few new areas to the curriculum. An area on "Exercises and Application" was added to the Department of Military Art, a course on "Building Superintendence" was added to the Department of Engineering, and the Department of Infantry added a course on "Infantry fire tactics."²³ By 1892, the instructional methodology of daily recitations had given way to a more seminar-like atmosphere of interaction and discussion between students and instructors. And it was in the 1890s that the curricular influence of faculty members such as Captain Arthur L. Wagner, who joined the faculty in 1886, began to be felt across the school.

Prior to 1891, few textbooks used at the school were authored by American officers. That rapidly changed. First Lieutenant J. B. Batchelor published *Infantry Fire—Its Use in Battle*; Captain W. D. Beach published *Field Engineering*; and Captain W. H. Carter published *Hippology*. Captain Wagner (USMA 1875) authored *Service of Security and Information* and *Organization and Tactics*, both of which were used in the Department of Military Art where he was in charge. The books published by faculty members were used to replace the textbooks authored by foreign officers being used at the Infantry and Cavalry School, which helped the Leavenworth school establish a reputation for excellent military publications.²⁴

Captain Wagner continued at the helm of the Department of Military Art until 1896 and was instrumental in developing the curricular changes to the school that were established with the publication of General Orders No. 49 in 1897. Along with an increase in practical

²³ Ibid.

²⁴ Ibid, 175. Lieutenant Batchelor's book was published in 1892; Captain Beach and Captain Carter's books were published in 1893; Captain Wagner's *Service of Security* was published in 1893 and his *Organization and Tactics* was published in 1894.

instructions, written examinations were held twice a year. The curriculum was reorganized into the following five departments with requisite courses:

1. Department of Tactics: Infantry Drill Regulations; Small Arms Firing Regulations; Infantry Fire and Use in Battle; Cavalry Drill Regulations; Equitation and Hippology; Field Artillery Drill Regulations; Manual of Guard Duty; Troops in Campaign; Security and Information; Organization and Tactics; and Practical Work in the study and application of the principles of minor tactics.
2. Department of Strategy: Military Policy and Institutions; Military Geography; Logistics; Staff Duties; Conduct of War; Maneuvers on Map and War Game; Military History; and Graduation Essay.
3. Department of Engineering: Military Topography and Sketching; Field Fortifications; Field Engineering; Signaling and Telegraphy; and Photography.
4. Department of Law: Military Law, Constitutional Law; International Law; and Administration.
5. Department of Hygiene: Studies in textbook of military hygiene.²⁵

This new edition of the curriculum had just been enacted when, due to the start of the Spanish-American War in 1898, the operation of the school was suspended after seventeen years of educating junior officers. The closing of the school at the beginning of the war marked the end of the opening phase of the school. The school remained closed until 1903 when it was reopened as part of the sweeping Army reforms inaugurated by Secretary of War Elihu Root.

United States Navy

In the years prior to the Spanish-American War, the Army was not the only branch of the military which recognized the need for post-commissioning officer education. Navy Commander Stephen B. Luce, a Civil War veteran and leading advocate for the professionalization of the U.S. Navy, was a firm believer in the scientific nature of warfare. For Luce, warfare was a science; therefore it could be taught and learned. Luce's experience in the Civil War had convinced him "that there were certain fundamental principles underlying military operations—principles of general application whether the operations were conducted on land or

²⁵ War Department General Orders No. 49, 1897, printed in Hunt, 177.

sea.”²⁶ Luce admired the military colleges of Europe for their systemic study of the art of war and military history and was convinced U.S. naval officers would benefit from similar study “as applied to the sea or such parts of the land as can be reached by ships.”²⁷ By the late-1870s, Luce decided it was time for the establishment of a Naval War College.

Luce wrote Secretary of the Navy R. W. Thompson in August, 1877, outlining his vision for a school for naval officers. Luce wrote,

I have the honor to propose for the consideration of the Navy Department the establishment of a school wherein our junior officers shall be carried through a post graduate course consisting of the higher branches of their profession.²⁸

Nothing came of Luce’s proposal for several years.

The late nineteenth century was a time of significant transition for the Navy. The Navy was moving from wooden to steel ships, from sail to steam power, and complicated engines and machinery were being incorporated into naval vessels. Shore duty officers were busy with the inspection and maintenance of ships, guns and engines and were eager to be a part of the emerging naval technological transition. Going back to school was seen as a distraction from the new Navy by many naval leaders.²⁹ Luce, however, would not let the matter die. Luce strongly believed that if the United States Navy was going to become a world-class fighting force and United States naval officers were going to become truly professional, then naval officers must be more than simply masters of the sea. Naval officers must become educated specialists in the conduct of war.³⁰ Commodore Luce met with new Secretary of the Navy William Chandler in the spring of 1884, resulting in Chandler’s appointment of a Board, under Luce’s guidance, to

²⁶ Ronald Spector. *Professors of War: The Naval War College and the Development of the Naval Profession* (Newport, RI: Naval War College Press, 1977), 17.

²⁷ Albert Gleaves. *Life and Letters of Rear Admiral Stephen B. Luce, U.S. Navy, Founder of the Naval War College* (New York: G.P. Putnam’s Sons, 1925), 171.

²⁸ Ibid. 168.

²⁹ Ibid. 173.

³⁰ Spector, 14.

“report and consider the whole subject of a post graduate course or school of application to be established by the Department for officers of the Navy.”³¹

The Luce Board reported its findings on June 13, 1884, which included recommendations on the scope and extent of the instruction as well as where to locate the school. The Board’s recommendations placed the study of the art of war and the study of naval military history as the leading features of the school. Additional instruction in diplomacy and international law were also recommended.³² Luce’s vision became reality on October 6, 1884 when Secretary Chandler issued General Order No. 325 formally establishing the Naval War College. The order stated, “A college is hereby established for an advanced course of professional study for naval officers, to be known as the Naval War College.”³³ Luce was ordered to report to Coaster Harbor’s Island off Newport, Rhode Island, the site selected for the Naval War College, to serve as the college’s first President. One building on Coaster Harbor’s Island, an old building that formerly served as an asylum for the poor, was allocated for the Naval War College. Upon arriving at the old building at the end of October, Luce placed his hand on the door and said, “Poor little poor house, I christen thee United States Naval War College.”³⁴

Despite its lofty goals, the Naval War College got off to a slow start. The War College building was in need of repair and renovation, and Navy engineers estimated the repair cost at \$36,000.³⁵ The Navy did not fund this building repair, and initially gave the War College no

³¹ Gleaves, 174. The Board was chaired by Luce, and the other members were Captain W.T. Sampson and Commander C.F. Goodrich. The Board became known as The Luce Board.

³² Ibid. 175. The Luce Board recognized that naval officers were often required to exercise diplomatic functions whenever visiting foreign ports and thus felt that studying international law to include the finer points of neutrality policies was appropriate for Naval War College students.

³³ Ibid. 176. The entire text of the order is reprinted in Gleaves, *Life and Letters of Stephen B. Luce*, pages 176-177.

³⁴ Spector, 26. See also Gleaves, 179. Spector admits there are several versions of the story of Luce christening the former poor house. The story he recounts was drawn from accounts in Bradley A. Fiske, *From Midshipman to Rear Admiral* (New York: Century, 1919), Gleaves, and conversations with Newport residents.

³⁵ Spector, 28.

money for books, building maintenance, furniture, lighting, or heating. Luce and his staff were left to scrounge for what they could find to prepare for their first class. Luce managed to acquire a lamp, some chairs and desks, some coal for heating, and Lieutenant William McCarthy Little made pasteboard models of ships to use as teaching aids. In addition, a map of the naval battle of Trafalgar was found and hung on the wall of the lecture room.³⁶

The War College's meager beginning was indicative of the larger Navy's indifference to the existence of the War College. Although Secretary of the Navy Chandler had approved establishment of the War College, many of the Navy's leadership were unconvinced of the utility of such a venture. The prevailing thought among the War College's many critics was that the age of sail was coming to an end and the study of historical battles fought under sail was not applicable to future naval battles. Instead, naval commanders should continue to trust instinct and inspiration to be their guides.³⁷ Luce countered that his vision of the Naval War College was to give naval officers the opportunity to "study the science of war at sea, to prepare them for the grave duties and responsibilities of high command."³⁸ The first academic session of the Naval War College, however, gave Luce's critics ample ammunition for criticism.

Although the Luce Board had recommended a class of 50 students of at least the rank of commander, the Navy detailed only 8 students, all lieutenants, to the Naval War College for its first session in September, 1885, which lasted one month. These 8 students mostly came from the Navy's Torpedo School on Goat Island, which was close to Newport, Rhode Island.³⁹

The curriculum for the first course consisted of lectures on military tactics and strategy, international law, and guest lectures on military history. In addition to Luce, the regular faculty

³⁶ Gleaves, 179.

³⁷ Ibid. 172.

³⁸ Ibid. 173.

³⁹ Spector, 27. See also Gleaves, 180.

members at the first session included Army Lieutenant Tasker H. Bliss, who lectured on military tactics and strategy, and J.R. Soley, a civilian lawyer from New York and professor at the Naval Academy who lectured on international law. Luce had also hired his friend, Commander Alfred Thayer Mahan, to serve on the Naval War College faculty as Professor of Naval Warfare. Mahan, however, was unable to arrive in time for the first session of the War College due to the slowness of the Navy in relieving him of his sea duty, so he spent the fall of 1885 preparing his lectures for when he would eventually arrive in Newport. Guest lecturers included Army General J.C. Palfrey, who lectured on the Peninsular Campaign of 1862, Army General George H. Gordon, who lectured on Grant's Civil War campaign in Virginia, and John C. Ropes, a civilian historian who lectured on The Wilderness and Cold Harbor campaigns during the Civil War.⁴⁰

The presence of Lieutenant Bliss, an Army officer, on the faculty of the Naval War College as well as lectures on land warfare given to naval officers ignited a storm of controversy from the Naval War College's critics. Luce answered these objections stating,

It is reasonably thought that the broad study of land warfare, so copiously illustrated in recent as well as earlier times, will materially aid the sea officers to correct conclusions as to the best use of yet untried weapons, for whose tactical efficiency in battle he must otherwise depend upon presumptions, resulting so far in very varying opinions.⁴¹

In addition, Luce wrote to the Secretary of the Navy:

I learn now that the department disapproves of the detail of an Army Officer as instructor. The absence of this officer would materially change the most important object of the curriculum. The recommendation was made with a special view to a comprehensive course of study in the art and science of war and by a method which will have the merit it is believed of being entirely original with our Navy.⁴²

⁴⁰ Gleaves, 180. See also Spector, 27-30.

⁴¹ Ibid. 182.

⁴² Spector, 29.

The Navy allowed Lieutenant Bliss to remain at the War College and the Army allowed the Navy to keep Bliss on faculty. Luce busied himself with preparations for the next session of the War College, scheduled to begin in September 1886, adding to the faculty several new officers, including Navy Lieutenant William B. Hoff to lecture on naval tactics, and Navy Lieutenant John F. Meigs to lecture on naval gunnery.⁴³

Luce was unable to attend the second session of the Naval War College. When Commander Mahan arrived in Newport in the summer of 1886, Luce was ordered to report for duty with the North Atlantic Squadron and Mahan was named the new President of the Naval War College. The second class of the Naval War College was more robust than the first class. The second class began on September 4, 1886 with 20 students, mostly lieutenants, and concluded on November 20, 1886. The Naval War College curriculum begun under Mahan's leadership remained steady through 1892. Voluntary individual study was stressed over formal instruction. Students were required to be at the College from 9:00 AM to 1:30 PM daily, but that was all. Even some of the lectures were voluntary. The rest of the day was accorded to the student for individual study.⁴⁴ The curriculum still consisted of lectures on history, tactics, and international law by regular faculty and guest lecturers (Even future President of the United States Theodore Roosevelt was a guest lecturer at the Naval War College), but practical exercises were also added beginning with the second class. Before he left the War College, Luce had secured the use of naval ships to be used at Newport by War College students in naval tactics. The curriculum consisted of the following:

The War of 1812
Naval Gunnery
The Proposed Isthmian Canal and the Caribbean
Naval Strategy

Theodore Roosevelt
J.F. Meigs
C.H. Stockton
A.T. Mahan

⁴³ Ibid.

⁴⁴ Ibid. 31-32.

Strategic Features of the Pacific Coast
 Strategic Features of the Gulf Coast
 Strategic Study of the Lake Frontier
 Naval History
 Coast Defense
 Military History, Strategy, Tactics
 Tactics of the Gun
 Tactics of the Ram
 Tactics of the Torpedo
 Fleet Battle Tactics
 War Games
 Naval Logistics
 General Staff and Intelligence
 International Law
 The Ship as Gun Platform

C.H. Stockton
 A.T. Mahan
 C.C. Rodgers
 A.T. Mahan
 D. Kennedy & H.L. Abbott, USA
 T.H. Bliss, USA
 J.F. Meigs
 P.F. Harrington
 D. Kennedy
 A.T. Mahan
 W.M. Little
 C.C. Rodgers
 C.C. Rodgers
 J.R. Soley
 R. Gatewood⁴⁵

Although the curriculum remained stable, the continued existence of the Naval War College itself was less certain. The mid-1880s through the mid-1890s were troubled times for the Naval War College. The College managed to survive the lack of support from Secretaries of the Navy William C. Whitney and Hilary A. Herbert as well as the open hostility of many naval officers who viewed the War College as a post-graduate course better suited to be part of the Naval Academy at Annapolis. In addition, the College endured congressional appropriation battles over War College funding. The Naval War College was consolidated with the Navy's Torpedo School under the Navy's Bureau of Ordnance and placed under the Torpedo Station on Goat Island in Newport Harbor for two years before coming into its own again.

Mahan was ordered to special duty in 1890 and the Naval War College held no classes in 1890 when an immediate replacement for Mahan was not found. Classes were also cancelled for 1891. Mahan returned to the College as President in 1892 and classes were held, but he was ordered to sea in 1893 and classes were again canceled. Captain Henry C. Taylor succeeded Mahan as President of the Naval War College and classes were held from 1894-1898, but were cancelled in 1899 due to the Spanish-American War. Although Luce was no longer President of

⁴⁵ Ibid. 33-34.

the Naval War College, he continued to be a vocal advocate for the school along with Mahan and their few supporters during this time.⁴⁶

In 1890, Mahan published his seminal work, *The Influence of Sea Power Upon History*, which garnered him international acclaim and was very influential in foreign navies. Undoubtedly, Mahan's international stature as a naval authority and his support for the Naval War College played a key role in the survival of the school.

Significant curriculum changes at the Naval War College were instituted under Captain Taylor's tenure as President. The College had been focused on lectures, individual study, and practical exercises. Taylor continued the lectures but they played a lesser role in the curriculum. The War College began to focus its curriculum toward possible future conflicts with the introduction of "the main problem", war games, and war planning. This new curricular focus at the Naval War College coincided with the emergence of a new sense of nationalism in the United States during the 1890s. The College began to "study in earnest the important strategic and tactical problems of the day and to develop its own distinctive methods of instruction."⁴⁷

The course length for the War College was set at 4 months long, and the class size remained around 20 officers. The "main problem" was a hypothetical war situation analyzed by the students. Arriving classes were divided into sections, and each section was assigned a portion of the problem to which they "prepared monographs on an aspect of the problem, drew up war charts and defense plans and wrote sample orders and directives."⁴⁸ The purpose of the main problem was to get students to make quick decisions in rapidly changing situations and give students a feel for wartime command. Taylor also had the annual main problem published

⁴⁶ For a detailed explanation of the troubles endured by the Naval War College during its first years of existence, see Spector, Chapter 5.

⁴⁷ Spector, 71.

⁴⁸ Ibid. For a detailed example of a main problem, see Spector, 72-73.

in the U.S. Naval Institute's periodical *Proceedings*. In addition to the main problem, a reading course was begun which concentrated on the political-military aspects of naval warfare and the practical ship exercises grew into miniature fleet experiments with various tactical problems.⁴⁹

War games at the Naval War College were designed by Lieutenant William McCarty Little and became a permanent part of the curriculum. Using war game ideas from the Army's of the United States and Europe as a guide, Little designed three types of naval war games: the dual game, tactical game, and strategic game, which simulated action between two opposing ships, two opposing fleets, and two opposing navies respectively. Little devised an elaborate scoring system using stencils to represent ships, a large board representing the ocean, rolling of dice to represent "hits", and charts representing probability of hits.⁵⁰ War games at the Naval War College were popular events and served as valuable analytical tools that helped the naval service become a real profession. Members of the War College staff and others such as Stephen B. Luce felt that development of naval service as a profession was hindered by the inability of the naval officer to practice his craft in peacetime. An officer could train and study for war, but not really practice his chosen craft. The war game afforded the naval officer that opportunity.⁵¹

War games and the annual main problem gave the War College a focus toward the nature of future conflict. The War College staff believed in the importance of planning for future wars, thus the staff "turned with enthusiasm toward the preparation of war plans for the United States."⁵² War plans were developed that dealt with possible war with England, and war with Spain that focused on action in Cuba. The War College's war plans included precise timetables of operations. In 1896, Captain Taylor and his staff submitted their Spanish war plan to the

⁴⁹ Ibid, 73-74.

⁵⁰ Ibid. See pages 74-78. Three-inch stencils represented ships and the ocean board was on a scale of 1-inch to 10 miles.

⁵¹ Ibid. 81.

⁵² Ibid. 86.

Navy Department and the War College soon began to study war plans developed by the Naval Intelligence Office. When the United States went to war with Spain in 1898, the War College had been heavily involved in the naval war planning, which enhanced its reputation in the aftermath of the war and helped solidify the War College as a permanent part of the Navy establishment.⁵³

The Naval War College reopened for classes in 1900, and the curriculum remained as it had prior to the Spanish-American War with its focus on war games and planning. The curriculum continued to focus on solutions to practical naval problems, including design of modern naval weapons and ships.

In 1912, the applicatory system was introduced into the curriculum. The applicatory system was a case method instruction which contained three elements: the estimate of the situation, writing standard orders, and evaluation of the proposed plan through map maneuvers. The applicatory system of instruction was introduced by Commander William L. Rodgers, a Naval War College faculty member who borrowed the idea from the Army during his tour of duty at the U.S. Army War College from 1907-1909.⁵⁴

In 1913, Secretary of the Navy Josephus Daniels expanded the scope and size of the Naval War College. Daniels reorganized the Naval War College into a two-year class consisting three courses: a 3-week elementary course for junior officers, a 4-month preparatory course, and 16-month War College course. The elementary course focused on tactical maneuvers, the preparatory course was divided among tactical and strategic problems, and the War College course contained four months of preparatory work and 12 months of advanced work. Enrollment

⁵³ Ibid. See pages 90-100.

⁵⁴ Ibid, 117. A student completed his estimate of the situation, then wrote a five-part order which included information on enemy and friendly forces; the plan of the commander-in-chief; orders to subordinates; supply orders; and the location of the commander-in-chief during operations. The students plan was then evaluated.

in the longer courses was fixed at 20 officers, and correspondence courses were also added with an enrollment of over 500 officers. The War College was now able to thoroughly instruct its students and the College was able to reach many more officers than could be accommodated in residence.⁵⁵

The Naval War College was closed during American involvement in World War I, but was reactivated in 1919. World War I, like the Spanish-American War earlier, helped justify the existence of the Naval War College. Rear Admiral William V. Pratt, assistant Chief of Naval Operations during World War I, remarked after the war that "it took the World War to prove to the service at large the inestimable value in a practical way of this school."⁵⁶

General Service and Staff College

Following the Spanish-American War, the Army did not immediately reopen its Infantry and Cavalry School at Fort Leavenworth, Kansas. Instead, the school reopened in 1902 as part of the Army's comprehensive educational system designed to educate its officers at specific stages as their careers progressed. This new educational system was part of the larger Army reform efforts undertaken by Elihu Root, who became United States Secretary of War in 1899, which included expanding the size of the Army, creating the position of Army Chief of Staff and creation of the Army General Staff. In his annual report for 1901, Secretary Root stated,

In the reorganization of the enlarged army, about 1,000 officers have been added from the volunteer force, so that more than one-third of all the officers of the army have been without any opportunity whatever for the systematic study of the science of war. On the other hand, the rapid advance of military science; changes of tactics required by the changes in weapons; our own experience in the difficulty of working out problems of transportation, supply, and hygiene; the wide range of responsibilities which we have seen devolving upon officers charged with the civil government of occupied territory; the delicate relations which constantly arise between military and civil authority; the manifest necessity that the soldier, above all others, should be familiar with the history

⁵⁵ Ibid, 125-126.

⁵⁶ William V. Pratt, copy of unpublished autobiography prepared by Felicia Hyde, 1939, p. 168, *William V. Pratt Papers*, NHC, Box 10. Quoted in Spector, 144.

and imbued with the spirit of our institutions—all indicate the great importance of thorough and broad education for military officers. I cannot speak too highly of the work done in our service schools for a number of years before the war with Spain. It was intelligent, devoted and effective, and produced a high standard of individual excellence, which has been demonstrated by many officers in the active service of the past four years. There was, however, no general system of education.⁵⁷

War Department General Order Number 155, published on November 27, 1901, formally established the Army's new educational system. The schools comprising the educational system included post technical schools for individual branches such as artillery and engineering, the General Service and Staff College at Leavenworth (renamed from the Infantry and Cavalry School), and the Army War College at the apex.⁵⁸ War Department General Order Number 89, published on August 1, 1902, outlined the regulations for the General Service and Staff College and established one-year course of instruction to begin that September. The General Service and Staff College opened in September 1902 with 93 lieutenants assigned as students. All students assigned to the Staff College were lieutenants until 1907, when captains were assigned. General Franklin Bell, commandant of the Staff College, approved of the higher rank for Staff College students when he wrote in his annual report for 1907,

The detailing of lieutenants for instruction here has been, in my opinion, a mistake, not for the reason that the officer detailed did not receive immense personal benefit and professional knowledge, but because after graduation, they were never, or very rarely, able to put this newly acquired knowledge into practice, either in their companies or regiments.⁵⁹

A two-year course was planned for the Staff College, but the final course of study was a compromise until the two-year course could be instituted. Most of the students were new officers with little education or field experience, thus the curriculum included much of the same

⁵⁷ Ira Reeves. *Military Education in the United States* (Burlington, VT: Free Press Printing Co, 1914), 209. See also Hunt, 179-180.

⁵⁸ Nenninger, 56-58; Harry P. Ball, *Of Responsible Command: A History of the Army War College* (Carlisle Barracks, PA: The Alumni Association of the U.S. Army War College, 1984), 57-68; and George S. Pappas, *Prudens Futuri: The U.S. Army War College, 1901-1967* (Carlisle Barracks, PA: The Alumni Association of the U.S. Army War College, 1967), chapter 3.

⁵⁹ Hunt, 183.

elementary subjects that would be taught to junior officers at the post schools: small arms regulations, drill, guard duty, organization, and tactics. The Army ensured that better qualified officers attended the next class of the Staff College to meet the intent of the school.⁶⁰ Brigadier General Franklin Bell arrived as commandant of the General Service and Staff College in 1903 and instituted changes to the school structure and curriculum that shaped the school through World War I.

Under Bell's tenure, Leavenworth returned to a two-year course and the General Service and Staff College became two individual schools: the Infantry and Cavalry School for the best graduates of the post schools, and the Army Staff College for the highest graduates of the Infantry and Cavalry School. In this manner, only the best graduates from the first year (the Infantry and Cavalry School) would continue to the second year (the Army Staff College). In his annual report for 1904, General Bell stated,

A return to the old two-year course had been recommended to the War Department, but it was suggested that, instead of having a class matriculate and graduate every two years, one should matriculate and one graduate each year, thereby having always at the institution two classes under instruction, a first and second class. It was finally decided in order to round out and complete, in a systematic and uniform manner, the series of service schools for all arms of the service, to divide the General Service and Staff College into two schools, an 'Infantry and Cavalry School', as formerly, and a 'Staff College', and to establish a 'Signal School,' all three to be situated at Fort Leavenworth.⁶¹

Instruction at the Infantry and Cavalry School included tactics, strategy and military history lessons, field engineering, and law. The Staff College curriculum was intended to bridge the gap between the tacticians of the Infantry and Cavalry School and the strategists of the Army War College. The curriculum at the Staff College included instruction in staff duties, original research in military history and strategy, lectures in naval warfare, geography, grand tactics,

⁶⁰ Nenninger, 59-61.

⁶¹ Reeves, 211.

logistics, advanced engineering, and practical studies through visits to Civil War battlefields. Students at the Staff College also prepared and evaluated tactical problems for the Infantry and Cavalry School. In 1907, the Infantry and Cavalry School was renamed the Army School of the Line.⁶²

Curriculum at both the School of the Line and the Staff College remained stable through the early years of the twentieth century leading up to World War I. On the eve of American involvement in the war, the curriculum at the Army Staff College was contained in four departments: the department of military art; the department of military engineering; the department of military law; and the department of languages. Within the department of military art, the course of study included instruction in staff duties, tactics, military history, cooperation between the Army and Navy strategically and tactically (lectures were presented by a Navy officer whenever possible), and care of troops. Within the department of military engineering, instruction was given in military topography, sketching, and fortification via lectures, field problems, and map problems. In the military law department, students studied military government and martial law, the laws of war, and military aid to civil authorities through lectures, case studies, and original research. Language instruction in French, German, or Spanish was offered as elective study. Army Staff College students were not given examinations. If a student was suspected of neglecting his studies, the commandant had the authority to relieve the student of duty at the Staff College and send him back to his unit. Graduates of the Army Staff College were exempt from promotion examination for a six year period.⁶³

Graduates of the Leavenworth schools made significant contributions to the American war effort in World War I. Leavenworth graduates were involved in the planning, organizing,

⁶² Nenninger, 72-74. See also Reeves, 217-221.

⁶³ Reeves, 221-223.

and training of the large American Expeditionary Force (AEF) that would fight in France in 1918. General John Pershing, commander of the American AEF, recognized the training and education of Leavenworth graduates and placed them in key positions. For example, five of the seven staff officers who accompanied Pershing to France were Staff College graduates. Following the war, General Pershing stated, "I declare without hesitation that but for the training in General Staff duties given our officers at the Service Schools, at home before the war and in France during the war, our successful handling of great masses of partially trained troops could not have been possible."⁶⁴

The apex of Secretary Root's educational system for the Army was the Army War College. Root's vision for the War College was to serve as an adjunct body of the Army General Staff, and his vision of its curriculum was captured in his annual report of 1899 when he described his intent for students "to receive instruction at this college in the science of war, including the duties of the staff, and in all matters pertaining to the application of military science to national defense."⁶⁵ In February 1900, Root established a board of three officers to consider organization and functions for the War College, and appointed Brigadier General William Ludlow, a Civil War veteran and recent veteran of the Santiago campaign, to lead the board.⁶⁶ The Ludlow Board reported its recommendations in October 1900 for the War College to function both as an academic institution and a staff in line with Root's initial vision. Formally

⁶⁴ Hanson E. Ely. *Address at Opening of General Service Schools* (Fort Leavenworth: General Service Schools Press, 1922), 9. Quoted in Nenninger, 150.

⁶⁵ Elihu Root, *Five Years of the War Department, 1899-1903: As Shown in the Annual Reports of the Secretary of War* (Washington: GPO, 1904), "Report of the Secretary of War for 1899," 63. Quoted in Ball, 59.

⁶⁶ The other two members of the board, known as The Ludlow Board, included Colonel Henry C. Hasbrouck, an artillery officer with experience at the Army Artillery School, and Lieutenant Colonel Joseph P. Sanger, a member of the Army Inspector General's department. The Ludlow Board and its members are described in detail in Ball, 62-63.

established in November 1901 through War Department General Order Number 155, the War College was set to be located at Washington Barracks in Washington, D.C.⁶⁷

A new building to house the Army War College was constructed at Washington Barracks in Washington D.C. Secretary of War Elihu Root spoke at a ceremony marking the laying of the cornerstone for the new War College building on February 21, 1903. In his remarks, Root said, "Not to promote war, but to preserve peace by intelligent and adequate preparation to repel aggression, this institution is founded."⁶⁸ Root went on to say the duty of the War College was "to study and confer on the great problems of national defense, of military science, and of responsible command."⁶⁹

On August 15, 1903 Brigadier General Tasker Bliss was named the first President of the Army War College. Bliss was a good choice for the position. Bliss was a graduate of the United States Military Academy at West Point, a former member of the West Point faculty, and a former member of the faculty of the Naval War College. Bliss was fluent in four languages, had served as a military attaché in Spain, and been a governmental official in Havana, Cuba. Bliss would later serve as U.S. Army Chief of Staff during World War I and was a peace commissioner at Paris in 1919.⁷⁰ The first year of the Army War College began on November 1, 1903, but without students. Bliss and his staff prepared for the expected arrival of their first class of officers in the fall of 1904. Bliss used this time to outline his vision for the War College. Bliss did not believe that the War College curriculum should repeat that of the post schools or the Army Staff College. In his mind, Bliss felt Army War College students should have already received instruction in the art of war at the Leavenworth schools. At the War College,

⁶⁷ Ibid, 68.

⁶⁸ Elihu Root. *Military and Colonial Policy of the United States, Addresses and Reports*. Edited by Robert Bacon and James Brown Scott (Cambridge, MA: Harvard University Press, 1924), 121.

⁶⁹ Ibid.

⁷⁰ Ball, 95 and 107.

Leavenworth graduates would learn by doing. Bliss saw the War College as an adjunct institution of the General Staff and therefore should solve practical military problems and present those solutions to the Army Chief of Staff and Secretary of War for subsequent approval. Thus, Bliss designed a course of work, not a formal curriculum for War College students.⁷¹

The first class of the Army War College began on November 1, 1904 with nine students, three majors and six captains in a leased house on Jackson Street in Washington, D.C. (Temporary quarters until the War College building could be completed).⁷² The work activities Bliss designed included war plans, war games, and a series of informal lectures followed by discussion. In war planning, students critically studied an existing war plan and suggested improvements. The students then began with the same set of assumptions in the existing plan and prepared an entirely new plan, which was compared to the existing plan and the two plans were discussed. At this point, the students war-gamed the two plans, which included drafting the necessary orders for forces and providing logistical support. Problems were isolated, analyzed, and discussed. Students also war-gamed an actual historical military campaign (such as from the Civil War) using current organizational structures, weapons, and tactics. In addition, Bliss assigned special studies to individual officers, such as studying the effects of a new weapon (for example, the machine gun) on military operations. Informal lectures and discussions on current military events and developments rounded out the seven-month course of work which closed at the end of May.⁷³

General Bliss was reassigned to command the Department of Luzon in the Philippines after the first session of the War College ended, and no successor was immediately named.

⁷¹ Ibid, 85-86. See also Nenninger, 58.

⁷² A member of the first Army War College student body was Captain John J. Pershing, who would later command the American Expeditionary Force in World War I. Pershing was only at the War College for two of the seven-month session before being reassigned as military attaché to Japan. See Ball, 95.

⁷³ Ball, 93-94.

Lieutenant Colonel William A. Wotherspoon, a member of the War College staff and former Assistant Commandant to General Franklin Bell of the Army Staff College, was named Acting President of the War College. Regarding the incoming Class of 1905-1906, Wotherspoon did not make any major changes to the course of work that General Bliss had instituted. As for the first War College class, the second class work centered around contingency planning. The problems the students addressed included United States intervention in Santo Domingo; intervention in Mexico to restore normalcy in case of a coup; a war with England; and a war with Japan. The special study problems Bliss had assigned to individual students were instead given to committees of students under Wotherspoon. The informal lectures included wartime employment methods for each of the Army's branches (infantry, artillery, cavalry, engineers, and signal) as well as topics related to the Russo-Japanese War.⁷⁴

Brigadier General Thomas H. Barry took over as President of the Army War College from Acting President Wotherspoon in December 1905. After the second session of the War College ended in May 1906, General Barry proposed a lengthening of the War College session from seven months to a full year to allow "studies of military histories, strategy, and tactics on the ground, with such indoor work as may be necessary" but the session remained at seven months.⁷⁵ General Barry's proposal to lengthen the War College session combined with the arrival in August 1906 of Major Eben Swift to the War College faculty signaled significant changes on the horizon for the Army War College.

Major Eben Swift had served as an instructor at the Infantry and Cavalry School prior to the Spanish-American War, and served both as an instructor and Assistant Commandant of the General Service and Staff College prior to arriving at the Army War College. Major Swift was a

⁷⁴ Ibid, 98-99.

⁷⁵ General Barry made his comments in a report to the Army Chief of Staff at the end of the second War College session. See Ball, 99.

firm believer in the applicatory method of learning and that the study of military history was the best way to learn military art. Importantly for the future of the War College, General Franklin Bell, the new Army Chief of Staff, was also a believer in the applicatory method. With General Bell's support, the scope and direction of the Army War College curriculum would change to more closely mirror the curriculum of the Army Staff College at Leavenworth.⁷⁶

The 1906-1907 War College session contained several new innovations for the class of eleven officers. First, Major Swift instituted four lectures on military history, and another lecture on The Battle of Antietam from the American Civil War. The Antietam lecture included a staff ride over the actual Antietam battlefield in which students created battle plans and orders for the Union and Confederate forces of 1862 using the weapons and tactics of 1907. Another innovation was the inclusion of thirty-one map problems ranging from small-unit to division size tactics, with learning accomplished by the applicatory method. The same type of contingency planning, special study problems, and informal lectures conducted in the first two War College sessions rounded out the course of study for the third War College session.⁷⁷

Significant curriculum changes in the Army War College that began with the 1907-1908 session shaped the War College through World War I. General Bell approved the extension of the War College session from seven months to one full year, with the year beginning on November 1 and ending the end of October. This additional time, coupled with the additional space afforded by the completion of the Army War College building at Washington Barracks, allowed the War College to broaden its scope. A tactics course titled Course of Military Art, taught by Major Swift, was added, which was a comprehensive course on tactics based on the applicatory method of learning. The number of map problems was increased from thirty-one to

⁷⁶ Ibid, 100-101. See also Nenninger, 58.

⁷⁷ Ibid, 100-102.

forty-six and included terrain exercises through the countryside in Virginia and Maryland. The remainder of the curriculum remained largely the same as previous sessions.⁷⁸

Major Swift continued to refine his Military Art course for the next two sessions. He departed from the War College in 1910 but his course remained. For the 1910-1911 War College session, the War College year was changed to run September 1 through June 30. This time period also marked a shift in the focus of the War College curriculum. The curriculum began shifting away from war planning and toward conducting military operations. Students began the year working on small-unit tactics problems, and gradually moved through division and corps operations, as well as cooperation between the Army and Navy. Students applied their new knowledge to a War Plan of the Year, which was similar to the Main Problem of the pre-1898 Naval War College curriculum. Studies in military history were conducted which informed student staff rides to Civil War battlefields. Toward the end of the class year, students worked outside on field problems in engineering and fortifications as well as role-playing Civil War maneuver campaigns. This was the curriculum that was representative of the Army War College from 1910 through World War I.⁷⁹

The Army schools at Leavenworth and the Army War College were closed when the United States entered World War I in 1917, but were reopened after the war. Army leaders were impressed with the wartime performance of graduates of the Army's new educational school system. In his annual report for 1917, Army Chief of Staff General Hugh L. Scott summarized the early war contributions of graduates:

Since war was declared, the demand for officers having this [War College] education has been enormous; the supply wholly is inadequate. But these few officers have worked with a devotion and skill worthy of great praise, and it is without fear of contradiction that I record the belief that had this small category of officers educated in general-staff

⁷⁸ Ibid, 105-106.

⁷⁹ Ibid, 107-114.

work never been created, the confusion, delay, and disappointments of 1898 would have been repeated in 1917.⁸⁰

Post-WW I

Concern over the efficacy of Professional Military Education schools in the United States was silenced after World War I. The wartime performance of Army and Navy officers who were graduates of their respective service's educational programs erased any doubt whether the schools were producing the caliber of officers needed to fight and win the nation's wars. Both the Army and Navy faced challenges in mobilization, planning, command and control, and staff work on an unprecedented scale. Graduates of the Naval War College, as well as graduates of the Army Staff College and Army War College were well placed in command and staff positions to effect solutions to these difficult problems, thus enhancing the reputation of the nascent Professional Military Education system in the United States.

Not only was the continued existence of the Army and Navy military education schools permanently assured after World War I, but the interwar years between World War I and World War II was a boon for expansion of Professional Military Education in the United States. Three new military education schools were established during the interwar period: the Army Industrial College, the Marine Corps Field Officer Course, and the Air Service School. Additional Professional Military Education institutions were created after World War II, including the National War College, the Air War College, and the Armed Forces Staff College, which laid the foundation for the current structure of military education schools in the United States today.

Conclusion

The Civil War ushered in a time of profound change for the United States military. Changing technology, massive armies, and the increasing size, scope, and nature of conflict

⁸⁰ US Army, Annual Report of the Chief of Staff, 1917, p. 127. Quoted in Pappas, 87.

necessitated a need for military officers who were competent not only in the technological aspects of warfare, but competent in the art of warfare and strategy. Thus, in the years following the American Civil War, there was a growing recognition by the United States Army and Navy of the need for Professional Military Education among its officer corps. The Army and Navy established their military education institutions thanks to far-sighted leaders such as Commodore Stephen B. Luce and Brigadier General Emory Upton. These leaders and their fellow supporters of military education endured criticism, apathy, budget constraints, and personnel problems. Still, they persevered. The Spanish-American War and World War I demonstrated that the performance of military officers educated in the service Staff and War Colleges was critical to the nation's military victories.

The curriculum of the early military education institutions in the United States did not always meet the intent and goals of the school, and was subject to both internal and external influence. The new military education schools were coming into being during a time of unprecedented change in weapons, tactics, and the nature of warfare itself. Both the Army and Navy grappled with defining the skills and talents their future commanders would need to possess in order to win future conflicts. As military leaders tried to keep pace with their changing world, they tinkered with the military education curriculum. At times, the curriculum lagged behind the changing vision of military leaders. At other times, the faculty and staff of military education schools initiated curricular changes that kept pace with the changing times and leadership direction.

The same could be said of military education today. In the post-September 11th world, United States leaders grapple with defining the nature of future warfare and how to educate and prepare military leaders to fight and win this future conflict. Current military education schools

in the United States are molding their curriculum to produce officers capable of operating in today's rapidly-evolving international security environment. These times are reminiscent of the uncertain world facing Stephen Luce, Alfred Mahan, Emory Upton, and Tasker Bliss at the turn of the twentieth century. These and other visionary men recognized the need for educated officers and had the courage to alter the curriculum when needed, or simply start over. These military education pioneers laid the foundation of a Professional Military Education system that would become the robust system we have today.